

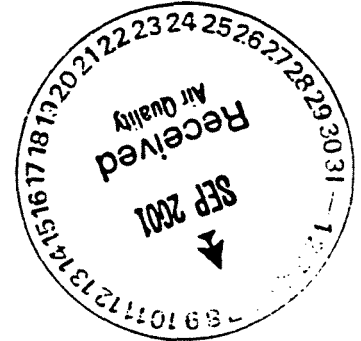
**BASIN ELECTRIC
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September 7, 2001

Mr. Terry O'Clair
Director, Division of Air Quality
Environmental Health Section
North Dakota Department of Health
1200 Missouri Avenue
Bismarck, ND 58504-5264



Re: Response of Basin Electric to Department Requests
Dated July 3, 2001 for Leland Olds Station

Dear Mr. O'Clair:

The North Dakota Department of Health ("NDDH") has requested Basin Electric Power Cooperative ("BEPC" or "Basin Electric") to provide information concerning a possible major reconsideration of Prevention of Significant Deterioration Class I increment consumption by major, minor and area sources in North Dakota. This process may lead to the imposition of further controls on some or all of those sources. This letter is Basin Electric's response to your July 3, 2001 request for information with respect to Basin Electric's Leland Olds Station. We have also used this opportunity to provide you with our view of important issues affecting this undertaking.

EPA Threatened SIP Call

Basin Electric sincerely appreciates the efforts of the NDDH to respond carefully and thoughtfully to the assertion by EPA Region 8's Director of Air and Radiation Program that increment "violations" resulting from permitted SO₂ emissions from North Dakota sources now require NDDH to adopt additional controls on North Dakota sources to remove those violations. EPA threatens a "SIP call" if "appropriate control strategies" are not adopted.

One basis for EPA's assertions is the new and novel legal proposition advanced by EPA's Region 8's February 1, 2000 letter that the variances previously granted by NDDH to North Dakota sources, which models predicted would contribute to exceedances of the Class I increments, are no longer valid or effective and in fact the Class I SO₂ increments must be met despite the issuance of those variances.

NDDH had granted the variances based on determinations by the Federal Land Manager of Theodore Roosevelt National Park (TRNP) and Lostwood Wilderness Area that those sources would not cause adverse effects on air quality related values ("AQRVs") in those Class I areas.

Basin Electric respectfully disagrees with the new legal position taken by EPA in its letters to NDDH dated February 1, 2000 and March 13, 2001. EPA provides no adequate explanation or citation of the legal basis, rationale or authority for this reversal from its past position and practice in recognizing and accepting the variances granted in North Dakota. Nor does EPA provide any basis for questioning the



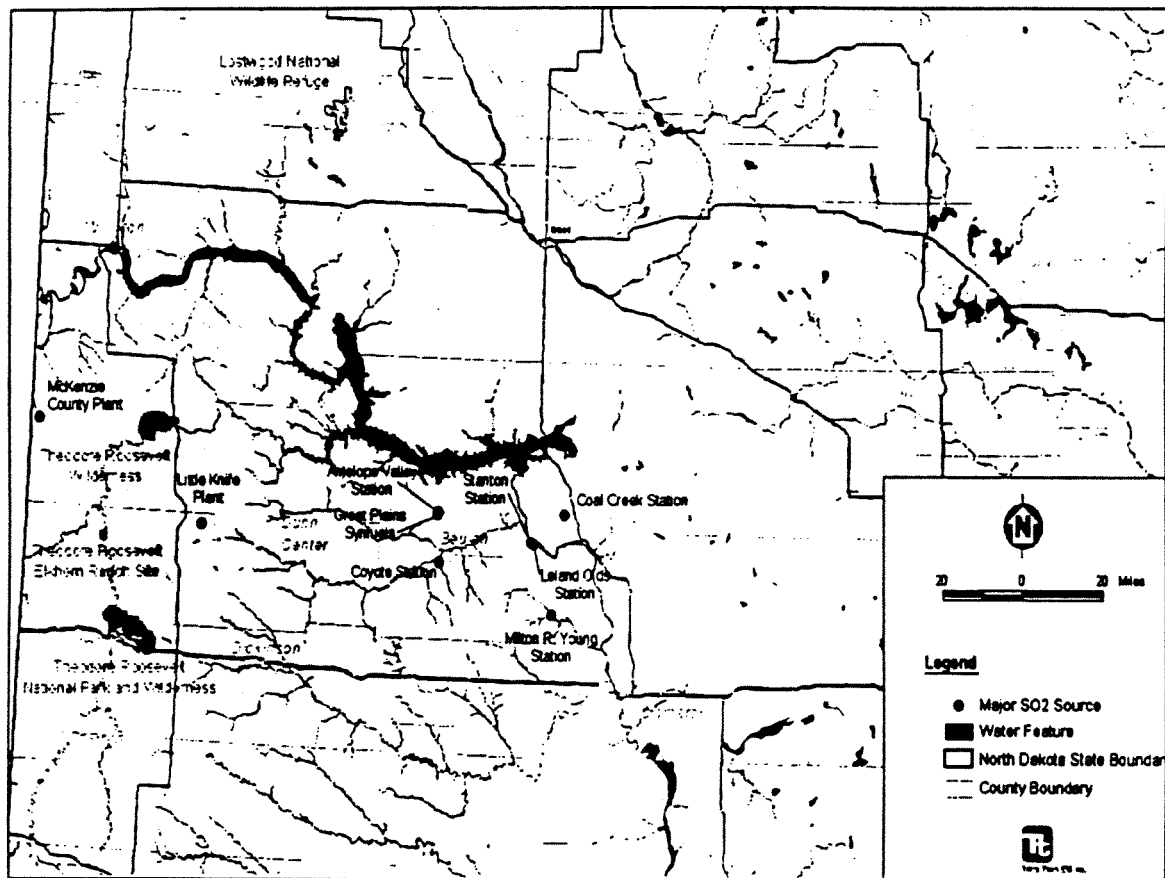
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consistent determinations by the Federal Land Manager of the Class I areas that those areas will not be adversely affected by North Dakota sources. Furthermore, EPA offers no explanation why the statutory alternative maximum increases do not apply, instead of Class I increments.

EPA has never before made a SIP call on such a basis, nor has it ever adopted a SIP to nullify a variance granted by the Federal Land Manager which authorized issuance of a state PSD permit. Yet EPA has asked NDDH to undertake an unprecedented, costly and complex regulatory proceeding to model North Dakota major, minor and area sources and to adopt additional control measures for some or all of those sources, and has threatened a SIP call if it does not. Basin Electric requests NDDH to ask EPA to provide a substantial, detailed legal analysis to support its position before putting NDDH and North Dakota sources through a proceeding requiring the expenditure of millions of dollars in resources with the potential for requiring many hundreds of millions of additional control expenditures.

Basin Electric's Leland Olds Station ("LOS")

The Leland Olds Station, located in Mercer County, North Dakota is shown on the map below, as are North Dakota's Class I areas, TRNP North and South and Elkhorn Ranch Units and Lostwood Wilderness Area.



Map 1

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LOS is more than 100 miles distant and downwind from the generally prevailing winds at TRNP Elkhorn Ranch Unit and Lostwood Wilderness Area, while it is approximately 87 miles from TRNP South Unit and 94 miles from TRNP North Unit, again downwind.

The Leland Olds Station was developed to meet a specific need for coal-fired thermal generation to supplement the existing federal hydro system in an integrated power supply for Basin Electric's member cooperatives. It was designed for what is generally known as a "base load plant". As a base load plant, it was expected that the plant would operate at full load around the clock, unless the facility needed to be backed down due to equipment failure or maintenance. During the baseline years of 1976-77, the plant was operating well below its design capacity. Operating levels increased significantly in later years, especially in the past decade, but the plant continues to operate below its design capacity.

Construction on LOS Unit No. 1 commenced in 1963 and was completed in 1965, several years before passage of the Clean Air Act (CAA) in 1970. The CAA required sources such as LOS to limit their emissions to meet national ambient air quality standards ("NAAQS") for SO₂ and particulate matter. NAAQS were set at levels adequate to protect public health, with an ample margin of safety, and welfare, including any known or reasonably anticipated adverse effects on other important resources.

On September 10, 1971 a variance was issued to LOS by NDDH that required the installation of pollution control equipment specifically designed for LOS and approved by NDDH. The equipment selected and approved for LOS was a Research Cottrell electrostatic precipitator with a design efficiency for removal of particulate matter of 99.5%. (See Exhibit A, NDDH Permit No. 730004 dated June 1, 1973; Exhibit B, amended NDDH Permit No. 730004 dated April 11, 1977; Exhibit C, amended Permit No. 730004 dated March 12, 1990; and Exhibit D excerpt from LOS Title V Permit No. T5-F73004.) North Dakota regulations also imposed an SO₂ emissions standard on LOS of 3.0 pounds of SO₂ per million BTUs, North Dakota's allowable emissions standard applicable to LOS was included in a 1972 SIP approved by EPA.

LOS Unit 2 commenced construction in 1971 and completed construction in 1975. The source-specific allowable determination of particulate matter and SO₂ concluded, similarly to Unit 1, that stringent particulate matter control was required, namely two Western Precipitator Division, Joy Manufacturing Company electrostatic precipitators with a particulate matter removal efficiency of 99.05%. No add-on controls were required to meet the SO₂ NAAQS.

This letter will address the following:

- I. HAS EPA ESTABLISHED THE NEED FOR A "SIP CALL" TO CURE INCREMENT "VIOLATIONS?"
- II. THE DECISION ON WHETHER TO INITIATE A PROCEEDING BASED ON POSSIBLE INCREMENT EXCEEDANCE IS FIRST AND PRIMARILY A STATE DECISION. SUCH

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A DECISION CAN BE REVERSED BY EPA ONLY IF EPA CAN DEMONSTRATE THAT IT IS CLEARLY ERRONEOUS, ARBITRARY OR CAPRICIOUS.

- III. THE ALLOWABLE EMISSIONS OF BEPC'S LELAND OLDS STATION ARE INCLUDED IN BASELINE EMISSIONS AND DO NOT CONSUME INCREMENT. THESE EMISSIONS APPROXIMATE LOS'S "REPRESENTATIVE" EMISSIONS.
- IV. RESPONSE TO SPECIFIC QUESTIONS.
- V. TREATMENT OF INCREMENT-EXPANDING SOURCES.

I. Has EPA Established the Need for a "SIP Call" to Cure Increment "Violations?"

Prior to undertaking an unprecedented major proceeding to determine whether hundreds of millions of dollars of additional pollution control expenditures may be required for existing permitted plants in North Dakota, there should be a substantial showing of the need for such a proceeding. That need should be based on a reasonable belief that significant deterioration of air quality is occurring in North Dakota's Class I areas. An examination of the facts demonstrates that there is no reason to believe that such significant deterioration is taking place, and demonstrates good reasons to believe that air quality in those areas has improved and is continuing to improve.

The modeling proceeding being considered by NDDH under threat of an EPA SIP call would take many months and is likely to cost many millions of dollars to both the regulated community and the State of North Dakota. The need for such expenditures should have a sound basis.

- A. Preliminary, modified CALPUFF modeling by the State of North Dakota is not an Adequate Basis for a SIP Call. There should be a sound and reasonable basis for determining that there is a likelihood of prohibited increment exceedances before a SIP proceeding to cure increment "violation" is undertaken.**

EPA's basis for requiring a SIP call or its informal equivalent was stated in EPA's letter dated February 1, 2001, with its attached draft SIP call and technical support documents. It relied entirely on a very preliminary draft "Calpuff Class I Area Analysis for Milton R. Young Generating Station" dated May 24, 1999 ("Calpuff Modeling Report" hereafter), prepared by NDDH, relying heavily on technical support of the National Park Service. That analysis resulted from a minor modification proposed to the Milton R. Young plant, since withdrawn.

- B. CALPUFF is not a Guideline Model, and may not, under North Dakota's EPA-approved SIP, be used for regulatory purposes in North Dakota without notice and opportunity for public comment.**

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NDDH air quality regulations provide that "All estimates of ambient concentrations required under this section must be based on the applicable air quality models, data bases, and other requirements specified in the "Guidelines on Air Quality Models" as supplemented by the "North Dakota Guideline for Air Quality Modeling Analyses" NDAC section 35-15-15-01-1.f.(1). The regulations provide that "[w]here an air quality impact model specified in the documents incorporated by reference in paragraph 1 is inappropriate, the model may be modified or another model substituted provided: (a) any modified or nonguideline model must be subjected to notice and opportunity for public comment under subsection 5." If the model is used as the basis for granting a permit, written approval must be approved by EPA. NDAC section 35-15-15-01-1.f.(2)(a) & (d).

The modeling that EPA has used as the basis for establishing the need for a SIP call, CALPUFF, is not a model contained in the "Guideline on Air Quality Models," nor has it been the subject of notice and opportunity for comment. These are requirements that both EPA and NDDH must follow under North Dakota regulations and because those regulations are contained in the EPA-approved North Dakota SIP. They have not been followed here, and should be complied with before serving as the basis for a SIP call or for threatening NDDH with a SIP call.

Even if CALPUFF were a Guideline Model, notice and opportunity would clearly be required before regulatory use of the model for purposes of a SIP call. The modeling done in this case was not the use of a standard or "off the shelf" version of Calpuff, but instead a highly modified version:

"NDDH used the supporting software programs provided by Earth Tech . . . the primary model developer, for preparation of input data and interpretation of model results. However, modification of some of Earth Tech's programs and the preparation of numerous additional programs, was required to complete these tasks."

Calpuff Modeling Report, p. 3.

Numerous other significant modifications and compromises were made to Calpuff:

"To keep disk storage and model execution time requirements practical, grid cell size was set to 20km. P. 5.

Due to missing opaque cloud cover data "NDDH developed an objective scheme to extrapolate opaque from total cloud cover. This scheme was coded into a computer program . . . and applied to all surface data sets." P. 7

"EPA recommendations were followed to substitute for other missing data (i.e., ceiling height, wind, pressure,

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temperature, relative humidity). Substitutions were made if data elements were missing for one or two consecutive hours The EPA substitution scheme was coded into a computer program . . . and applied to all surface data sets."

Id.

"Because of Calmet's [meteorological data processing part of Calpuff] fairly strict requirements on the completeness of upper-air data records and the frequency of missing upper-air data . . . much of the upper-air data processing was accomplished by running programs written by NDDH staff, along with a fair amount of manual file editing. The procedure consisted of . . . execution of two NDDH programs to fill in some missing data, and some manual editing to handle more complicated problems or fill in extended missing periods." PP. 7-8.

"One problematic issue which arose during the testing of Calmet was a chronic discontinuity between surface and upper wind levels. . . . the NDDH modified the Calmet code to simply eliminate the vertical extrapolation in Step 2, resulting in a more realistic transition from surface to upper layers." P. 15.

"John Vimont (NPS) provided initial advice on control file settings. Default values were used when other information was not available (i.e., most of the time). *** Values for selected Calpuff control file parameters/options were individually and systematically varied to determine effect on results and execution time" P. 18.

Thus, numerous changes and modifications were made to Calpuff. These were evidently important treatments of missing data, and extrapolations made to deal with it. Such changes can affect the results of the modeling critically, especially in the case of long range transport assessment of short terms impacts, where upper air data, especially wind direction and ceiling height, can be determinative of the outcome.

North Dakota has faced the need to develop and use a nonguideline air quality model to assess the impacts on air quality in North Dakota Class I areas on at least three occasions in the 1980s and 1990s. The initial development and acceptance of the model involved comprehensive, detailed, public review of and hearings on all appropriate modeling inputs, including wind field data, other meteorological and climate data, and modeling methodology. EPA, environmental groups, North Dakota citizens affected, and the regulated community all participated extensively in the public hearings. Those hearings resulted in the approval and use

of a MESOPUFF modeling protocol for the assessment of impacts on Class I areas. That modeling predicted exceedances of the SO₂ Class I increments in North Dakota Class I areas.

As a result, proceedings were conducted by the Federal Land Managers to determine whether the SO₂ emissions of the proposed sources would result in adverse impacts on air quality related values. In the case of every major source or major modification of a PSD source permitted in North Dakota since the beginning of the PSD program, it has been determined either that (1) there would be no exceedances of the applicable SO₂ increments, or (2) if they would result in exceedance of the Class I SO₂ increments, a variance was justified because there would be no adverse impacts on air quality related values in the Class I areas and there would be no exceedance of the alternative maximum allowable maximum increases specified in § 165(d)(2)(C)(iv) of the Clean Air Act, 42 U.S.C. § 7475(d)(2)(C)(iv). Several hundred millions of dollars of investment in electric generating, synfuels and gas processing facilities have been made in reliance on EPA- and NDDH-approved use of MESOPUFF and on these variance determinations. In view of this reliance, there should be a sound and compelling basis for discarding it.

In summary, Basin Electric submits that even taken on its own terms, the very preliminary and highly modified Calpuff modeling that has been done to date does not justify convening a major modeling hearing, especially when source attrition, variances, improving air quality, the lack of any pending regulatory action, and the lack of critical data are considered.

Early model runs with Calpuff, discussed in EPA's letter of February 1, 2000, had indicated possible Class I increment exceedance at two Montana Class I areas, namely Fort Peck Indian Reservation and Medicine Lakes Wilderness Area. Later model runs appropriately including Milton R. Young Station, Leland Olds Station and Stanton Station in the baseline resulted in compliance with the PSD Class I SO₂ increments in those areas. See Memorandum from Steven F. Weber dated February 25, 2000. (Ex. E). We have assumed that this issue is no longer presented. If it were, there are numerous legal and technical requirements for such an interstate determination that have not been met that would have to be addressed before any determination justifying federal or state SIP calls could be made.

- C. The latest evaluation (1993) and decision by the Department of Interior on whether North Dakota sources have an adverse effect on air quality related values in North Dakota Class I areas concluded that there were no such effects, and that alternative maximum allowable increases would be met, as have at least two prior proceedings.**

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The latest assessment of the impacts of SO₂ on North Dakota's Class I areas was made on March 8, 1993 by the Federal Land Manager (FLM) of Theodore Roosevelt National Park and the Lostwood Wilderness Area. It occurred on the application by Dakota Gasification Company's Great Plains Synfuels Plant to increase its permitted, allowable emissions by 6,421 tons per year of SO₂. The FLM made the following determinations:

"1. The proposed increase in allowable emissions should not increase perceptible plume impacts or contribute to regional haze impacts in either Theodore Roosevelt NP[National Park] or the Lostwood WA[Wilderness Area].

"3. There is no evidence of existing adverse impacts on biological resources due to air pollution at either Theodore Roosevelt NP or the Lostwood WA.

"4. In general, the air quality in North Dakota appears to have improved, for various reasons, since the FLM's last certification of no adverse impacts in 1984.

"5. The maximum predicted pollutant concentrations at Theodore Roosevelt NP and the Lostwood WA are well below the alternate Class I increments provided for in the Clean Air Act.

"6. There is no reason to believe that the proposed new allowable emissions from the GPSP would cause or contribute to impairment of the structure and functioning of ecosystems at Theodore Roosevelt NP or the Lostwood WA. Likewise, there should be no impairment to the visitor experience, or diminution of the national significance of the park or wilderness area."

58 Fed. Reg. 13639, 13640 (March 12, 1993).

In this 1993 proceeding, and in prior PSD proceedings, the allowable emissions from LOS and other grandfathered sources in North Dakota has always been included in the baseline concentration and were not modeled as increment consuming. EPA participated in prior North Dakota modeling and determinations based on MESOPUFF, as have the National Park Service and Federal Land Manager. EPA was required to approve in writing such modeling prior to the issuance of any permit.

These 1993 findings included the "existing impacts" of all relevant existing sources in North Dakota on the Class I areas in North Dakota, and found no evidence of adverse effects on biological resources, nor any reason to believe the additional SO₂ emissions would increase perceptible plume impacts or regional haze impacts, nor any impairment of the structure and functioning of ecosystems, or the visitor experience.

Finally, the FLM found that air quality had been improving, not deteriorating, in the Class I areas.

The FLM's decision and findings in early 1993 provide a point of departure for whether events or developments occurring since that time provide any substantial technical or scientific basis for believing that significant deterioration may have occurred in North Dakota's Class I areas.

- D. **Actual ambient air quality measurement in North Dakota Class I areas since 1993 show stable or declining ambient SO₂ levels, indicating that there is no evidence of deterioration in air quality-related values in Class I areas.**

The following Figures 2, 3, 4 and 5 show the actual SO₂ ambient monitoring data from stations located at TRNP North and South Units from 1979 to the present. Lostwood Wilderness Area is not included because there is very limited data and no data at all after 1991.

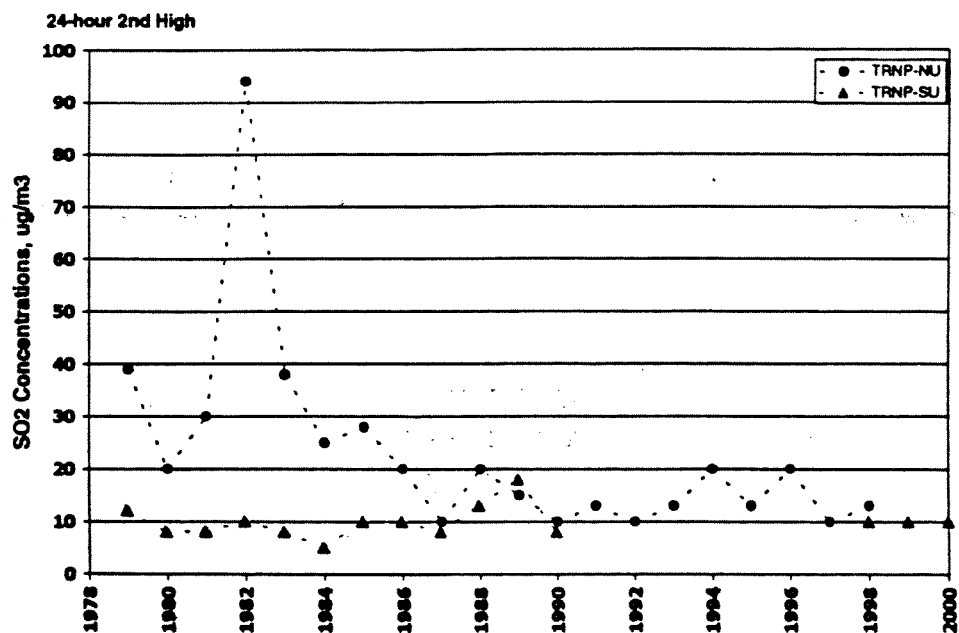


Figure 2

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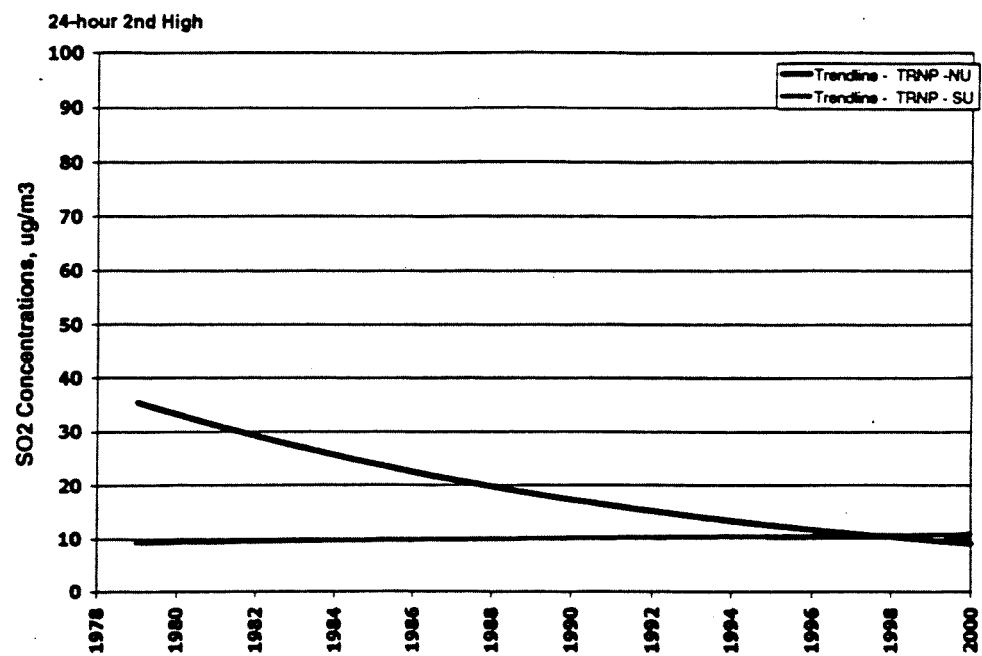


Figure 3

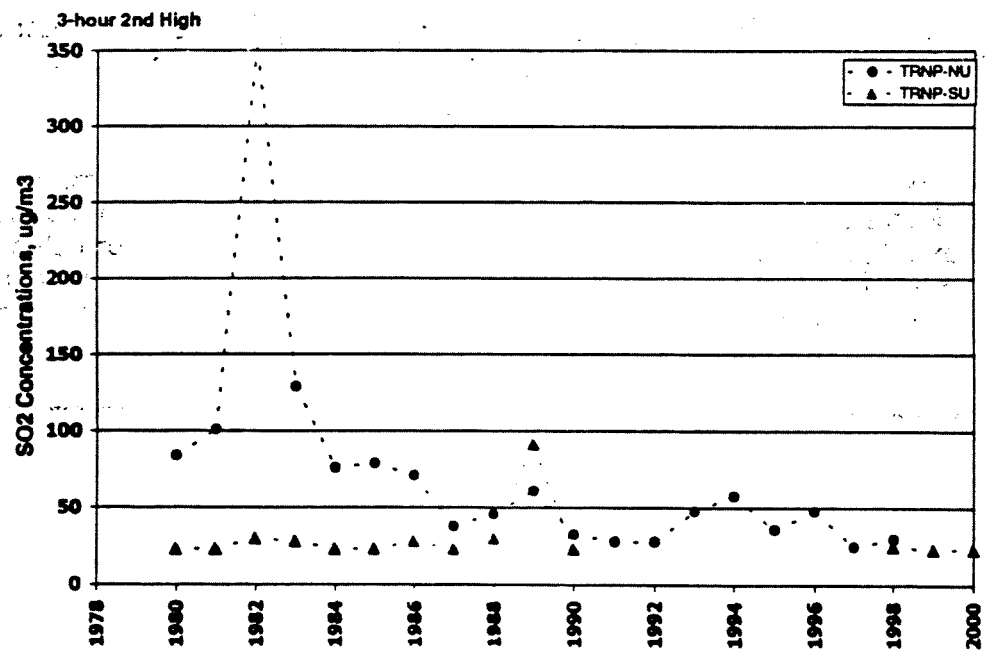


Figure 4

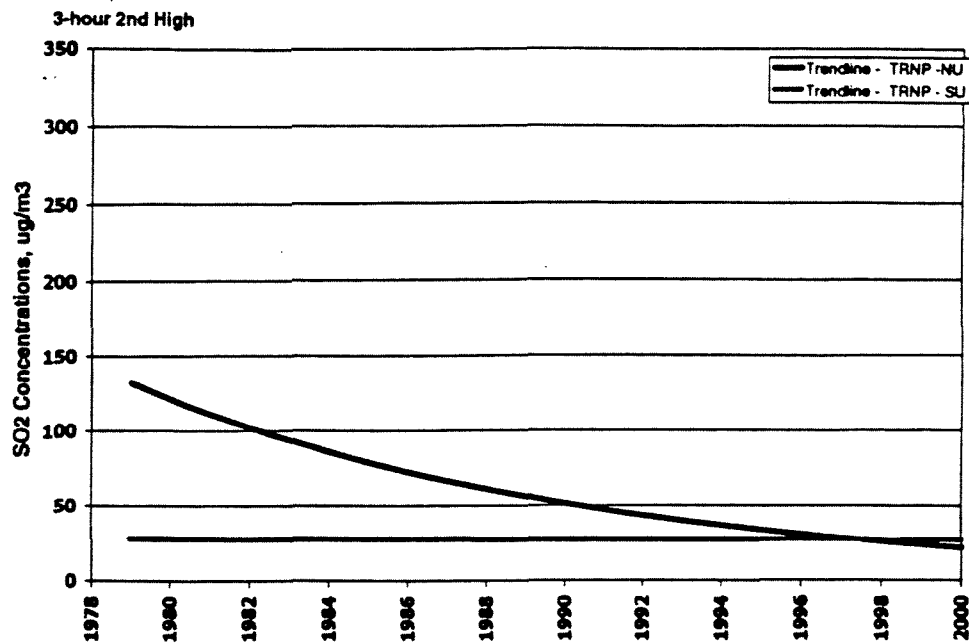


Figure 5

Figures 2 & 3 show the ambient monitored highest second high 24-hour SO2 readings, and their trend lines. Figures 4 & 5 show ambient monitored highest second high 3-hour readings and their trend lines. The 24-hour and 3-hour data time periods were selected because none of the existing modeling suggests that the annual SO2 Class I increments are exceeded in North Dakota Class I areas. The increments are written to assess the highest second high. 42 U.S.C. 7473(a) ("for any period other than an annual period, such regulations shall permit such maximum allowable increase to be exceeded during one such period per year.")

Figures 2, 3, 4 and 5 demonstrate clearly that SO2 levels in TRNP North and South Units have been stable or trended downward since 1993. Given the 1993 finding that AQRVs in Class I areas were not adversely impacted, the absence of any subsequent increase in ambient SO2 levels provides an additional margin of safety for protection of air quality-related values in these Class I areas.

- E. Actual emissions from North Dakota sources have not increased significantly since 1993. Actual SO2 emissions from minor sources in proximity to North Dakota's Class I areas have decreased very significantly.**

Table 1 presents data on actual North Dakota SO2 emissions from 1980-2000 for several categories of sources. These actual emissions vary from year to year based on economic cycles, market demand, and other

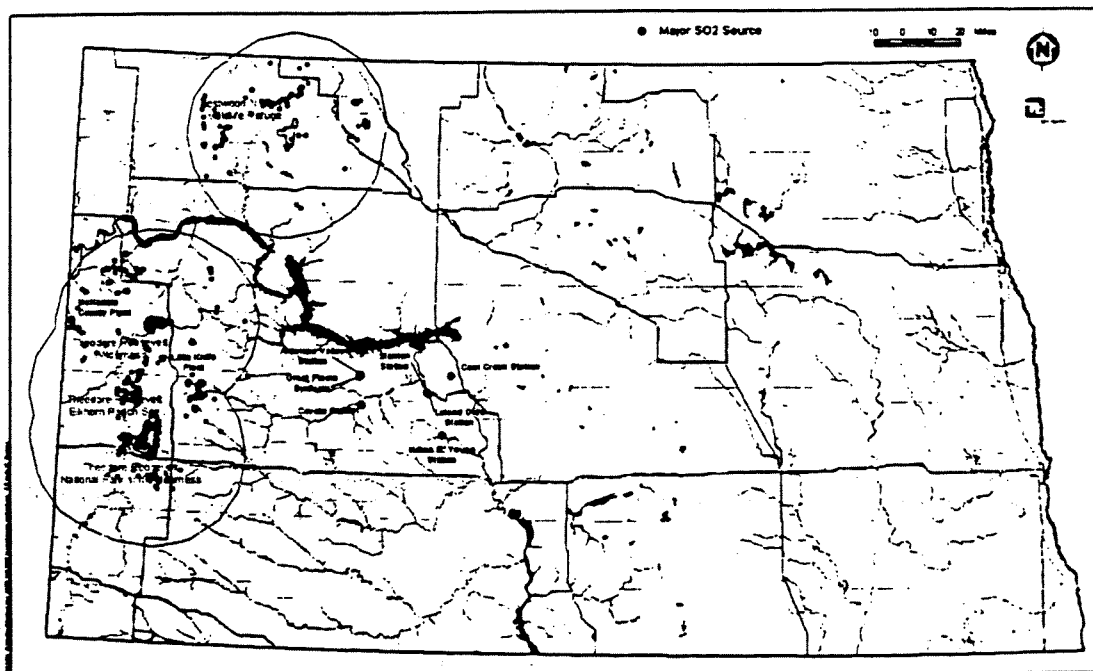
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factors. The most notable decrease in emissions are SO₂ emissions from oil and gas sources. These emissions have declined from a peak in 1982 of 34,425 tons per year to 4,900 tons in the year 2000. These "minor sources" are of particular relevance to the assessment of the impacts of SO₂ on Class I areas.

Table 1

Year	Annual Source SO ₂ Emissions						
	Utility Boilers (Tons)	Other Point Sources (Tons)	Total from Major Point Sources (Tons)	Oil & Gas Wells (Tons)	Area Sources (Tons)	Total SO ₂ Emissions from All Sources (Tons)	Avg. SO ₂ Emissions From Utility Boilers (LB/MMBTU)
1980	105,990			12,442	19,500		
1981	104,849	28,519	133,368	20,797	19,500	173,665	1.25
1982	115,482	26,601	142,083	34,425	19,500	196,008	1.25
1983	133,443	28,049	161,492	22,066	19,500	203,058	1.27
1984	136,937	33,653	170,590	19,436	19,500	209,526	1.27
1985	144,763	56,288	201,051	16,096	20,875	238,022	1.24
1986	128,659	60,196	188,855	21,687	21,000	231,542	1.11
1987	117,620	62,329	177,949	11,523	21,000	212,472	1.02
1988	149,441	55,766	205,207	13,351	21,000	239,558	1.05
1989	142,748	52,921	195,669	10,714	21,000	227,383	1.05
1990	156,109	44,221	200,330	10,217	21,000	231,547	1.09
1991	164,798	44,967	209,765	11,568	21,000	242,333	1.13
1992	162,211	57,752	219,963	11,048	21,000	252,011	1.08
1993	160,691	50,622	211,313	9,482	21,000	241,795	1.06
1994	160,630	50,020	210,650	7,769	21,000	239,419	1.06
1995	159,951	50,389	210,340	7,063	21,000	238,403	1.07
1996	173,997	61,146	235,143	5,935	21,000	262,078	1.11
1997	168,222	35,536	203,758	5,448	21,000	230,206	1.13
1998	185,343	30,161	215,504	4,943	21,000	241,447	1.18
1999	185,105	25,239	210,344	4,943	21,000	236,287	1.17
2000	150,771	23,290	174,061	4,900	21,000	199,961	0.88

Map 2 shows minor SO₂ sources (green) located within 50 kilometers of the North Dakota Class I areas. These minor sources were included in NDDH's 1999 Calpuff modeling. The particular relevance of these sources is that they are much closer to the Class I areas than many of the major sources and are at or near ground level. It is apparent that such sources are far more likely actually to impact the Class I areas than sources far more distant and downwind. Also, far smaller emissions in this local area may have far greater impact than a much larger emission diluted by meandering transport for 200 to 300 kilometers, as would be the case for LOS emissions. The decline in minor source SO₂ emissions may help explain the decline in ambient monitored levels at the North Dakota Class I areas.



Map 2

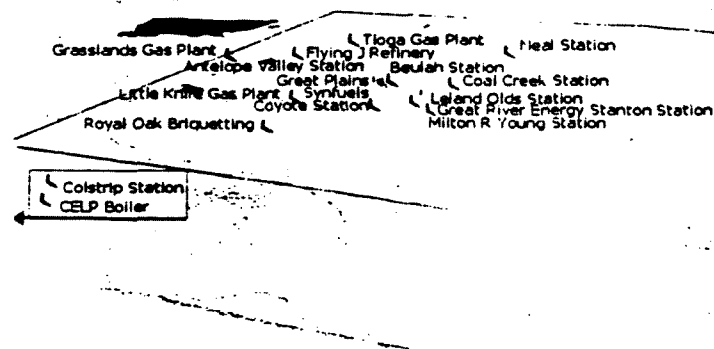
Other notable trends in the data are those with respect to annual utility boiler SO₂ emissions, SO₂ emission rates from utility boilers, and total annual SO₂ emissions from all sources. Relevant comparisons from Table 1 include the following:

Utility Boiler SO ₂ emissions:	Tons Per Year
1993:	160,691
2000:	150,771

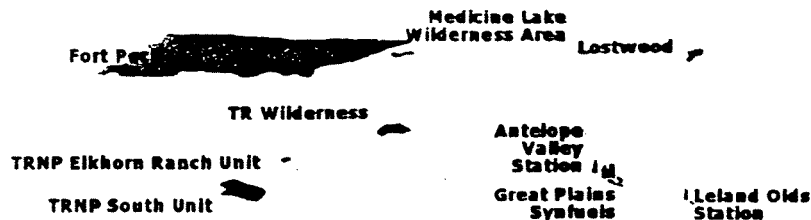
Average Utility Boiler SO2 emissions:	LBS/MMBTU
1993:	1.06
2000:	0.88
Total SO2 Emissions:	Tons Per Year
1993:	241,795
2000:	199,961

Table 1 shows some variability in total SO2 emissions in the period 1993 to 2000, but there has been no significant upward trend and levels have trended downward in the most recent years. Basin Electric submits that given the location of SO2 sources and the trend of their emissions, there is no reason to expect significantly increased impacts on air quality related values in the North Dakota Class I areas, much less exceedances of the alternative maximum allowable increases. In fact, given the significant decrease in minor sources located closer to the Class I areas, there is reason to believe that the decline in ambient monitored SO2 may be explained by a decline in nearby emissions sources.

Another important fact concerning emissions which have the potential to impact Class I areas is that, due to shutdowns or curtailments of grandfathered facilities, there has been a substantial expansion of the Class I increment from five "increment expanding" sources: Tioga Gas Plant, Neal Station, Flying J Refinery, Beulah Station, and Royal Oak Briquetting. (See table 4.1, Calpuff Modeling Report for the Milton R. Young Generating Station.) Map 3 shows the increment expanding sources, other major SO2 sources, and their locations relative to Class I areas. Map 4 shows the location of Basin Electric and Dakota Gasification Sources relative to North Dakota and Montana Class I areas.



Map 3



Map 4

The combination of increment expansion, stable or declining total SO₂ emissions for the past decade, and significant decreases in emissions from sources nearest the Class I areas further corroborate the conclusion suggested by the downward trend in monitored SO₂ emissions in Class I areas and the absence of any observed or predicted adverse impacts on AQRVs: there is no justification for a SIP revision or associated modeling at this time.

- F. EPA's Position that variances granted to North Dakota sources are not effective is not legally sound and provides no reasonable basis for a SIP call proceeding.**

The major sources in North Dakota have had their permitted, allowable emissions reviewed on several occasions for effects on North Dakota's Class I areas. Where necessary, due to model-predicted exceedances of the Class I increment, the Federal Land Manager has made findings of no adverse impact on air quality related values in Class I areas. Therefore, the major sources in North Dakota currently have valid, existing permits for their allowable emissions, with variances granted during permitting as required by the Clean Air Act, the most recent in 1993 (discussed above in section I.C.). In the case of North Dakota variances, the sources also were required to demonstrate that their ongoing, allowable emissions would not exceed the alternative maximum allowable ambient increases that apply to variance sources. These alternative maximums are as follows for SO₂:

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Micrograms per cubic meter

Annual	20
Twenty-four hour	91
Three-hour	325

The alternative maximum SO₂ increases applicable to variance sources are contained in section 165(d)(2)(C)(iv) of the Clean Air Act. They are the applicable increments in North Dakota Class I areas for variance sources. Neither in the 1982 variance proceeding, in which EPA participated extensively, nor since has there been any suggestion by EPA or the FLM that these were not the applicable or enforceable maximum ambient increases. EPA has not contested the many determinations of compliance by North Dakota sources for the last two decades. There was never a suggestion in these proceedings that any North Dakota variance source would have to meet the Class I increments despite the granting of a variance, nor that the variance was temporary or ultimately ineffective to authorize the source to operate permitted levels. Indeed, had those positions been raised and prevailed, the sources might not have been permitted, for in each case it was determined that even with Best Available Control Technology installed, the source could not meet the Class I SO₂ increments. In fairness and equity, those positions should have been raised, and the sources should have had an opportunity to have them resolved, before they were built, not 20 years afterward. In the case of each permit issued to a source for which a variance was issued using MESOPUFF, EPA was required to issue its written approval.

Nonetheless, for the first time, and in response to an abandoned minor change in a permit, EPA has written to NDDH that even though variances were granted for certain sources, and even though they have been found not to affect adversely air quality related values in those areas and to meet the alternative increments, the Class I SO₂ increments must still be met. EPA Region 8 Air and Radiation Program Director Richard R. Long states in his letter of February 1, 2000 to Mr. Jeff Burgess of NDDH that:

"... the State is still required to correct the Class I increment , which could be accomplished by obtaining reductions from other increment-consuming sources or by expanding the increment through reductions in emissions from baseline sources."

The only legal authority cited for this extraordinary departure from two decades of interpretation and practice, is an inconclusive passage from a court decision that does not address the issue. EPA's Mr. Long states that:

"The Alabama Power Court Decision explains that, although the Class I variance does treat the applicable PSD source with special consideration, the 'totality of facilities . . . may be subject to

measures necessary to cope with a condition of pollutants exceeding the PSD maximum.' . . . Thus although the FLMs granted variances for these PSD facilities, the State should have revised the SIP to correct the increment violations. Alternatively, EPA could have issued a call for a SIP revision pursuant to 40 CFR 51.166(a)(3), which we still could do."

The most obvious and apparent defect of this analysis is that the passage cited makes reference to the "PSD maximum" not to the Class I increment. When a variance has been granted, the "PSD maximums" are the alternative maximum allowable increases contained in Section (165)(d)(2)(C)(iv) of the CAA. More fundamentally, the quotation from the *Alabama Power* case is taken out of context. The Court decided merely that the Act does contain authority to require protection of applicable increments. Its decision cannot be read to mean the maximum increases in section 165(d)(2)(C)(iv) do not apply to variance sources, as provided by the statute. Basin Electric has no quarrel with the enforceability of the alternative maximums, through a SIP call if necessary, but believes the statute is plain on its face that those are allowable increases applicable here.

EPA's position on this issue is of such fundamental importance to the actions it mandates of NDDH, that it should be resolved prior to undertaking any further proceedings. The authority EPA has cited for its fundamental departure from past interpretation and practice is not applicable, and does not support its position. The EPA position appears to have been given a most cursory and casual level of consideration, certainly not one sufficient to trigger proceedings costing private parties and the states millions of dollars and potentially leading to hundreds of millions of additional control costs. According to EPA's Mr. Long, the entire basis for EPA's determination is that:

"We've done some research on this issue and discussed the topic with OGC [Office of General Counsel], and we believe the Class I increment still applies in these areas for all of these facilities."

A legal issue of this import should be resolved after careful briefing and discussion by all of those involved at the highest levels of the agencies involved. That has not been done and needs to be done here.

Section 165(d) of the Clean Air Act makes clear that the Class I SO₂ increments are not the final determinant for Federal Land Manager, EPA or state action, or SIP calls. That section provides that permits may be denied even when the Class I increment is met, and may be granted even when it is not met, as well as providing alternative allowable maximum ambient increases when variances are granted. EPA has provided no sufficient explanation as to how and why the Class I increments must still be enforced in these circumstances.

Because Dakota Gasification Company's Great Plains Synfuels plant is a source that has been granted a variance, the subject of the validity and effect of variances, and of EPA's position, is discussed in more detail in DGC's response to NDDH's request for information. The comments of DGC in its letter to NDDH of this same date are incorporated herein and made part hereof by this reference.

G. There is no regulatory action pending that requires a current re-evaluation of impacts on Class I increments.

The minor regulatory matter that triggered NDDH's preliminary draft Calpuff modeling effort is no longer pending. As noted in section I.B., that modeling was incomplete, had many limitations, much missing data, required compromises due to computer capacity, used a nonguideline model, and made numerous modifications, including writing many new programs to that model, without notice or opportunity for hearing. The source involved commented that the model had been used beyond its specifications.

If the regulatory matter had not been withdrawn, the modeling issues might have been resolved. NDDH could have decided, after notice and opportunity for comment and hearing, that the MESOPUFF modeling that had already determined Class I increment exceedances and served as the basis for the granting of variances and permits should be discarded in favor of a new and better model, that also predicted similar exceedances. The issue would in due course have been presented to the Federal Land Manager to determine whether there was an adverse effect on air quality related values and a variance would either have been granted or denied. Based on the trends in measured SO₂ in the Class I areas, and the trends in minor source and major source emissions, there appears to be no reason to think that the FLM would not grant the variance.

It is inadvisable to initiate a major regulatory proceeding, the equivalent of a SIP call, when there is no regulatory action pending that requires it.

H. A Proceeding to Protect the Class I Increments is Unwarranted Factually or Legally.

The legal basis cited by EPA for its SIP call is 40 C.F.R. 51.166(a)(3):

"Required Plan Revision. If the State or the Administrator determines that a plan is substantially inadequate to prevent significant deterioration or that an applicable increment is being violated, the plan shall be revised to correct the inadequacy or the violation."

By its own terms, this provision requires action only "to prevent significant deterioration" or if "an applicable increment is violated." The applicable increment in the case of the major sources that have received variances

from the Class I increment are the alternative maximum allowable increases contained in section 165(d)(C)(iv) of the Clean Air Act (Part C, Prevention of Significant Deterioration), in 40 C.F.R. 52.21(p)(5), and in NDAC 35-15-15-01.4.j.(4)(b). There is no contention that these applicable maximums have been exceeded; therefore, there is no legal basis to proceed under this section.

40 C.F.R. 51.166(a)(3) has no counterpart in the Clean Air Act itself. It resulted from the decision in the *Alabama Power* case that the agencies involved had some undefined authority to protect the applicable increments. This power has, as best we can determine, never been applied by EPA since its creation in 1980. To the best of our knowledge, EPA has only threatened to make a purported increment exceedance SIP call in two instances: once in Wyoming's Powder River Basin and once in Texas' Houston Ship Channel. In both instances, the threat of SIP call was withdrawn, and the proceeding never took place.

No rules or procedures have been developed for implementing the very bare bones of 40 C.F.R. 51.166(a)(3). It is evident from the terms of that section that it must arise from a "determination" by the state or EPA. In this case, there is nothing more than a letter from EPA based on preliminary NDDH nonguideline draft modeling. There has been no determination by the Administrator of EPA or even the Regional Administrator of EPA. There has been no determination by the head of the NDDH. There have been no proceedings allowing anyone outside the agency to examine the basis for the "determination" that has not yet been made. There are, in short, many problems presented before 40 C.F.R. 51.166(a)(3) could result in a proceeding to require further control strategies, and certainly no basis for assuming at this point that increment "violations" have been established and that hearings should be limited to refining the modeling to allow the adoption of appropriate control strategies, as urged by EPA in its March 28, 2001 letter to NDDH.

- I. **Summary.** An examination of air quality data and trends in North Dakota leads to the conclusion that there is no substantial basis for determining that the applicable SO₂ increments in North Dakota Class I areas have been exceeded, nor is there good reason for undertaking a modeling proceeding to determine whether the increment is exceeded in North Dakota Class I areas. Basin Electric submits that such a proceeding is unjustified and unnecessary for the following reasons:

- Exceedances of the Class I SO₂ increments in North Dakota Class I areas were determined nearly twenty years ago. All North Dakota sources have been properly permitted on that basis since then.
- Appropriate findings of no adverse effect on air quality related values and no exceedance of the alternative